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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/808,750	03/25/2004	Thomas C. Targosz	23852	5872
50659	7590	12/15/2005		
BUTZEL LONG DOCKETING DEPARTMENT 100 BLOOMFIELD HILLS PARKWAY SUITE 200 BLOOMFIELD HILLS, MI 48304			EXAMINER AURORA, REENA	
			ART UNIT 2862	PAPER NUMBER

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

2/

<b>Office Action Summary</b>	Application No. 10/808,750	Applicant(s) TARGOSZ, THOMAS C.	
	Examiner Reena Aurora	Art Unit 2862	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1 - 14 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5 - 8 and 11 - 12 is/are rejected.
- 7) ☒ Claim(s) 2 - 4, 9 - 10 and 13 - 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 April 0325 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>05/27/04</u> . | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 5 – 8 and 11 - 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Ondrus et al. (5,831,151).

As to claim 1, Ondrus et al. (hereinafter Ondrus) discloses ferromagnetic tagging material suspended in a constituent mixing system having a first sensor (B sensor) for generating a first sense signal representing an amount of ferrous taggant particles per unit volume of a first component flowing adjacent the first sensor (B); a second sensor (AB sensor) for generating a second sense signal representing an amount of ferrous taggant particles per unit volume of a mixture of the first component and a ferrous taggant particle free second component flowing adjacent the second sensor (AB sensor); and a control (40) means responsive to the first and second sense signals for calculating a ratio of the volumes of the first and second components in the mixture (col. 3, line 35 – col. 4, line 39).

As to claim 11, Ondrus discloses ferromagnetic tagging material suspended in a constituent mixing system including the steps of a) providing a first sensor (B sensor) for generating a first sense signal representing an amount of ferrous taggant particles per unit volume of a first component flowing into a mixing device; b) providing a second

Art Unit: 2862

sensor (AB sensor) generating a second sense signal representing an amount of ferrous taggant particles per unit volume of a mixture of the first component and a ferrous taggant particle free second component flowing in the mixing device; and c) providing control means (40) for calculating a ratio of the volumes of the first and second components in the mixture (col. 3, line 35 – col. 4, line 39).

As to claims 5 - 6 and 12, Ondrus discloses comparing a value of the first sense signal with a value of the second sense generated after a predetermined delay representing a time required for a portion of the first component to travel from the first sensor to the second sensor (col. 5, lines 1 – 37 and fig. 4).

As to claim 7, Ondrus discloses control means connected to an information processing device and generating an output signal representing the ratio of the volumes to the information processing device (50, fig. 1).

As to claim 8, Ondrus discloses an A/D converter (420) for converting the first (B) and second (AB) sense signals (fig. 2).

### ***Allowable Subject Matter***

Claims 2 – 4, 9 – 10 and 13 - 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As to claims 2 – 4, the prior art fails to show at least one of the first and second sensors has a generally tubular body with a central passage through which material flows, an inner sense coil extending about a circumference of the passage, a drive coil

Art Unit: 2862

extending about a circumference of the inner sense coil, and an outer sense coil extending about a circumference of the drive circuit. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

As to claims 9 and 13, the prior art fails to show a filter averaging a first one of all of the pairs of points and averaging a second one of all of the pairs of points to obtain first and second averages respectively the first and second averages representing an amplitude and phase of the first and second sense signals. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

As to claims 10 and 14, the prior art fails to show a master for calibrating the first and second sensors, the first and second sensors each having a passage through which material flows, the master having a body with a smaller diameter end sized to fit into the passages and a larger diameter end sized for use as a handle, the body further having a core formed from a filler material and a predetermined percentage of the ferrous taggant particles. These features taken together with the other limitations of the claim renders the claims allowable over prior art.

### ***Prior Art of Record***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Lewis (4,686,469) is cited for its disclosure of a method and device for measuring magnetic particles in a fluid.

Kempster et al. (5,315,243) is cited for its disclosure of detection and discrimination between ferromagnetic and non-ferromagnetic conductive particles in a fluid.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Reena Aurora whose telephone number is 571-272-2263. The examiner can normally be reached on Monday - Friday, 7:00 - 3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, E. Lefkowitz can be reached on 571-272-2180. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Reena Aurora